VLAN com dois switches

VLAN100 - alunos 192.168.100.0/24
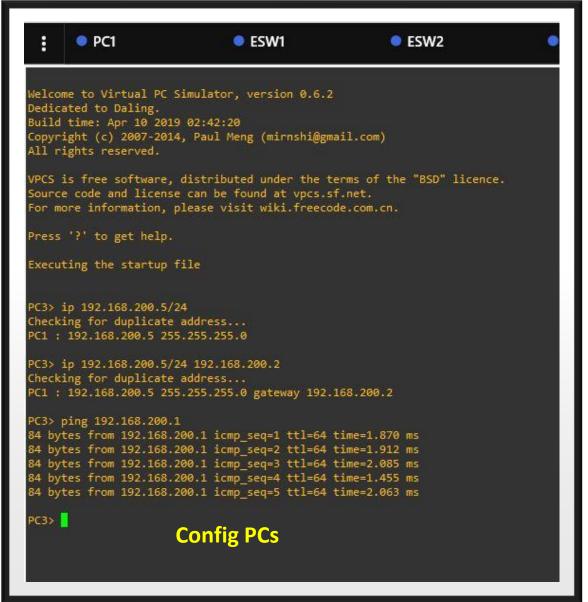
VLAN200 - docentes 192.168.200.0/24

ESW1 f1/1   TRUNK   f1/1 ESW2

f1/0   f1/1   f1/0

f1/2

PC1   e0   e0   PC2
192.168.100.1/24   192.168.200.5/24   192.168.200.1/24
VLAN100 - alunos   PC3   VLAN200 - docentes
                         VLAN200 - docentes

Criação de VLANs

```
Exiting....
ESW1#vlan database
% Warning: It is recommended to configure VLAN from config mode,
   as VLAN database mode is being deprecated. Please consult user
   documentation for configuring VTP/VLAN in config mode.

ESW1(vlan)#vlan 100 name xpto
VLAN 100 added:
      Name: xpto
ESW1(vlan)#vlan 300 name zpto
VLAN 300 added:
      Name: zpto
ESW1(vlan)#show vlan-switch
                   ^
% Invalid input detected at '^' marker.

ESW1(vlan)#exit
APPLY completed.
Exiting....
ESW1#show vlan-switch
```

Config PCs

```
: PC1 x  ESW1  ESW2

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Dedicated to Daling.
Build time: Apr 10 2019 02:42:20
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Press '?' to get help.

Executing the startup file

PC1> ip 192.168.100.1/24 192.168.100.0
Invalid gateway address

PC1> ip 192.168.100.1/24 192.168.100.2
Checking for duplicate address...
PC1 : 192.168.100.1 255.255.255.0 gateway 192.168.100.2

PC1> ping 192.168.200.1
host (192.168.100.2) not reachable

PC1>
```

Config PCs

```
: PC1  ESW1  ESW2

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Press '?' to get help.

Executing the startup file

PC2> ip 192.168.200.1/24 192.168.200.2
Checking for duplicate address...
PC1 : 192.168.200.1 255.255.255.0 gateway 192.168.200.2

PC2> ping 192.168.200.5
84 bytes from 192.168.200.5 icmp_seq=1 ttl=64 time=96.691 ms
84 bytes from 192.168.200.5 icmp_seq=2 ttl=64 time=1.856 ms
84 bytes from 192.168.200.5 icmp_seq=3 ttl=64 time=1.897 ms
84 bytes from 192.168.200.5 icmp_seq=4 ttl=64 time=1.739 ms
84 bytes from 192.168.200.5 icmp_seq=5 ttl=64 time=1.772 ms

PC2>
```

Config PCs

```
:  PC1        ESW1        ESW2

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Press '?' to get help.

Executing the startup file


PC3> ip 192.168.200.5/24
Checking for duplicate address...
PC1 : 192.168.200.5 255.255.255.0

PC3> ip 192.168.200.5/24 192.168.200.2
Checking for duplicate address...
PC1 : 192.168.200.5 255.255.255.0 gateway 192.168.200.2

PC3> ping 192.168.200.1
84 bytes from 192.168.200.1 icmp_seq=1 ttl=64 time=1.870 ms
84 bytes from 192.168.200.1 icmp_seq=2 ttl=64 time=1.912 ms
84 bytes from 192.168.200.1 icmp_seq=3 ttl=64 time=2.085 ms
84 bytes from 192.168.200.1 icmp_seq=4 ttl=64 time=1.455 ms
84 bytes from 192.168.200.1 icmp_seq=5 ttl=64 time=2.063 ms

PC3>
```

Config VLANs

```
ESW1#show vlan-switch

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa1/3, Fa1/4, Fa1/5, Fa1/6
                                                Fa1/7, Fa1/8, Fa1/9, Fa1/10
                                                Fa1/11, Fa1/12, Fa1/13, Fa1/14
                                                Fa1/15
100  alunos                           active    Fa1/0
200  docentes                         active    Fa1/2
1002 fddi-default                     act/unsup
1003 token-ring-default               act/unsup
1004 fddinet-default                  act/unsup
1005 trnet-default                    act/unsup

VLAN Type  SAID       MTU   Parent RingNo BridgeNo Stp  BrdgMode Trans1 Trans2
---- ----- ---------- ----- ------ ------ -------- ---- -------- ------ ------
1    enet  100001     1500  -      -      -        -    -        1002   1003
100  enet  100100     1500  -      -      -        -    -        0      0
200  enet  100200     1500  -      -      -        -    -        0      0
1002 fddi  101002     1500  -      -      -        -    -        1      1003
1003 tr    101003     1500  1005   0      -        -    srb      1      1002
1004 fdnet 101004     1500  -      -      1        ibm  -        0      0
1005 trnet 101005     1500  -      -      1        ibm  -        0      0
ESW1#
```

```
ESW1#config t
Enter configuration commands, one per line.  End with CNTL/Z.
ESW1(config)#interface fa1/0
ESW1(config-if)#switchport mode access
ESW1(config-if)#switchport access vlan 100
ESW1(config-if)#interface fa1/2
ESW1(config-if)#switchport mode access
ESW1(config-if)#switchport access vlan 200
ESW1(config-if)#interface fa1/1
ESW1(config-if)#switchport mode trunk
ESW1(config-if)#
*Mar  1 00:07:52.319: %DTP-5-TRUNKPORTON: Port Fa1/1 has become dot1q trunk
ESW1(config-if)#exit
ESW1(config)#exit
ESW1#sh
*Mar  1 00:08:09.107: %SYS-5-CONFIG_I: Configured from console by console
ESW1#show vlan-switch

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa1/3, Fa1/4, Fa1/5, Fa1/6
                                                Fa1/7, Fa1/8, Fa1/9, Fa1/10
                                                Fa1/11, Fa1/12, Fa1/13, Fa1/14
                                                Fa1/15
100  alunos                           active    Fa1/0
200  docentes                         active    Fa1/2
1002 fddi-default                     act/unsup
1003 token-ring-default               act/unsup
1004 fddinet-default                  act/unsup
1005 trnet-default                    act/unsup

VLAN Type  SAID       MTU   Parent RingNo BridgeNo Stp  BrdgMode Trans1 Trans2
---- ----- ---------- ----- ------ ------ -------- ---- -------- ------ ------
1    enet  100001     1500  -      -      -        -    -        1002   1003
100  enet  100100     1500  -      -      -        -    -        0      0
200  enet  100200     1500  -      -      -        -    -        0      0
1002 fddi  101002     1500  -      -      -        -    -        1      1003
1003 tr    101003     1500  1005   0      -        -    srb      1      1002
1004 fdnet 101004     1500  -      -      1        ibm  -        0      0
1005 trnet 101005     1500  -      -      1        ibm  -        0      0
ESW1#
```

Config VLANs

```
ESW2#config t
Enter configuration commands, one per line.  End with CNTL/Z.
ESW2(config)#interface fa1/0
ESW2(config-if)#switchport mode access
ESW2(config-if)#switchport access vlan 200
ESW2(config-if)#interface fa1/1
ESW2(config-if)#switchport mode trunk
ESW2(config-if)#
*Mar  1 00:10:14.767: %DTP-5-TRUNKPORTON: Port Fa1/1 has become dot1q trunk
ESW2(config-if)#exit
ESW2(config)#
```

```
ESW2#show vlan-switch

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa1/2, Fa1/3, Fa1/4, Fa1/5
                                                Fa1/6, Fa1/7, Fa1/8, Fa1/9
                                                Fa1/10, Fa1/11, Fa1/12, Fa1/13
                                                Fa1/14, Fa1/15
100  alunos                           active
200  docentes                         active    Fa1/0
1002 fddi-default                     act/unsup
1003 token-ring-default               act/unsup
1004 fddinet-default                  act/unsup
1005 trnet-default                    act/unsup

VLAN Type  SAID     MTU   Parent RingNo BridgeNo Stp  BrdgMode Trans1 Trans2
---- ----- -------- ----- ------ ------ -------- ---- -------- ------ ------
1    enet  100001   1500  -      -      -        -    -        1002   1003
100  enet  100100   1500  -      -      -        -    -        0      0
200  enet  100200   1500  -      -      -        -    -        0      0
1002 fddi  101002   1500  -      -      -        -    -        1      1003
1003 tr    101003   1500  1005   0      -        -    srb      1      1002
1004 fdnet 101004   1500  -      -      1        ibm  -        0      0
1005 trnet 101005   1500  -      -      1        ibm  -        0      0
ESW2#
```